

Appl. No. 10/644,111
Amdt. Dated October 14, 2005
Reply to Office Action dated June 15, 2005

IN THE SPECIFICATION

On Page Nos. 10 – 11 from Line No. 17 (Page No. 10) to Line No. 2 (Page No. 11), please amend the paragraph there appearing to read, as follows:

“Heavy gloves are a necessary part of a HAZMAT suit to protect against biological and chemical agents. However, gloves that are commonly used with HAZMAT suits impede the use of fine motor skills involved in handling standard stethoscopes. To alleviate this problem, the fluid tight housing 70 shown in Figures 1-4 has been designed for users wearing gloves 130. The overall size and shape of the housing 70 allows a user wearing gloves 130 to compensate for the loss of fine motor skills. Figure 3 shows how the sound sensing device 20 is typically held during use. The housing 70 also has a no slip grip 140 to provide an improved gripping surface for users wearing heavy gloves and a hand strap ring 150 or certain ring providing means for attaching the sound sensing device 20 about the hand of the user to prevent possible drop damage to the device 20. In other words, it is contemplated that the cordless stethoscope may comprise certain device-coupling means (such as hand strap ring 150) for removably coupling the cordless stethoscope or sound relaying device to another object.”

On Page No. 13, at Line No. 16, please insert certain specification-concluding paragraphs, as follows:

“While the above description contains much specificity, this specificity should not be construed as limitations on the scope of the invention, but rather as

Appl. No. 10/644,111

Amdt. Dated October 14, 2005

Reply to Office Action dated June 15, 2005

an exemplification of the invention. For example, it is contemplated that the spirit of the present invention essentially discloses a stethoscope comprising no external cords or wires. Hence, the stethoscope of the present invention is cordless. The cordless stethoscope of the present invention is designed for use in hazardous material environments such as those hereinabove specified, and in this regard, comprises a fluid-impermeable or fluid tight, hand-holdable casing assembly (such as fluid tight housing 70), a cordless data transmitter (such as transmitter 120), a remote receiver (such as receiver 50), and a sound reproduction device (such as ear piece or ear pieces 60).

It will be understood that the casing assembly is preferably sized and shaped to being grasped by a (gloved) human hand and manually operated with the human hand. The casing assembly essentially comprises a stethoscope head end (such as stethoscope head 30), which functions to receive auscultatory sound data or sound wave energy as inherently described hereinabove. Notably, the data transmitter is housed within the casing assembly for transmitting the auscultatory sound data received by the stethoscope head end to the remote receiver (without the aid of external wires or cords). The remote receiver then relays the auscultatory sound data transmissions as received from the data transmitter to the sound reproduction device, which sound reproduction device converts the relayed auscultatory sound data transmissions into audible sounds for diagnosis and/or treatment by users outfitted with or adjacent the sound reproduction device.

The cordless stethoscope may additionally comprise a microphone assembly (such as microphone 40), which assembly is preferably in electrical

Appl. No. 10/644,111
Amdt. Dated October 14, 2005
Reply to Office Action dated June 15, 2005

communication with the data transmitter for relaying voice sound data or sound wave energy to the data transmitter. In this regard, the data transmitter may also function to transmit voice sound data as received by the microphone assembly to the remote receiver. The remote receiver, in turn, functions to relay the voice sound data transmissions from the data transmitter to the sound reproduction device for converting the relayed voice sound data transmissions into audible sounds.

Preferably, the data transmitter of the disclosed cordless stethoscope is a magnetic induction type transmitter, which relays the auscultatory sound data to the remote receiver via an omnidirectional magnetic field. It will be recalled that magnetic induction type transmission for this type of device is to be preferred over using radio wave electromagnetic type transmission due to decreased interference and avoidance of compatibility issues with other peripheral medical equipment. It will thus be understood that the magnetic induction type transmitter functions to enhance cooperative usage of the cordless stethoscope along side or in cooperative association with peripheral (medical) equipment, which often operate utilizing (otherwise interfering) radio wave-based electromagnetic energy.

On Page No. 13 at Line Nos. 17 – 20, please amend the paragraph there appearing to read, as follows:

“Accordingly, although ~~Although~~ the invention has been described by reference to a number of preferred embodiments, some embodiments it is not intended that the novel device as taught by the foregoing descriptions be limited

Appl. No. 10/644,111

Amdt. Dated October 14, 2005

Reply to Office Action dated June 15, 2005

thereby, but that modifications thereof are intended to be included as falling within the broad scope and spirit of the foregoing disclosure, the following claims and the appended drawings.”